

100

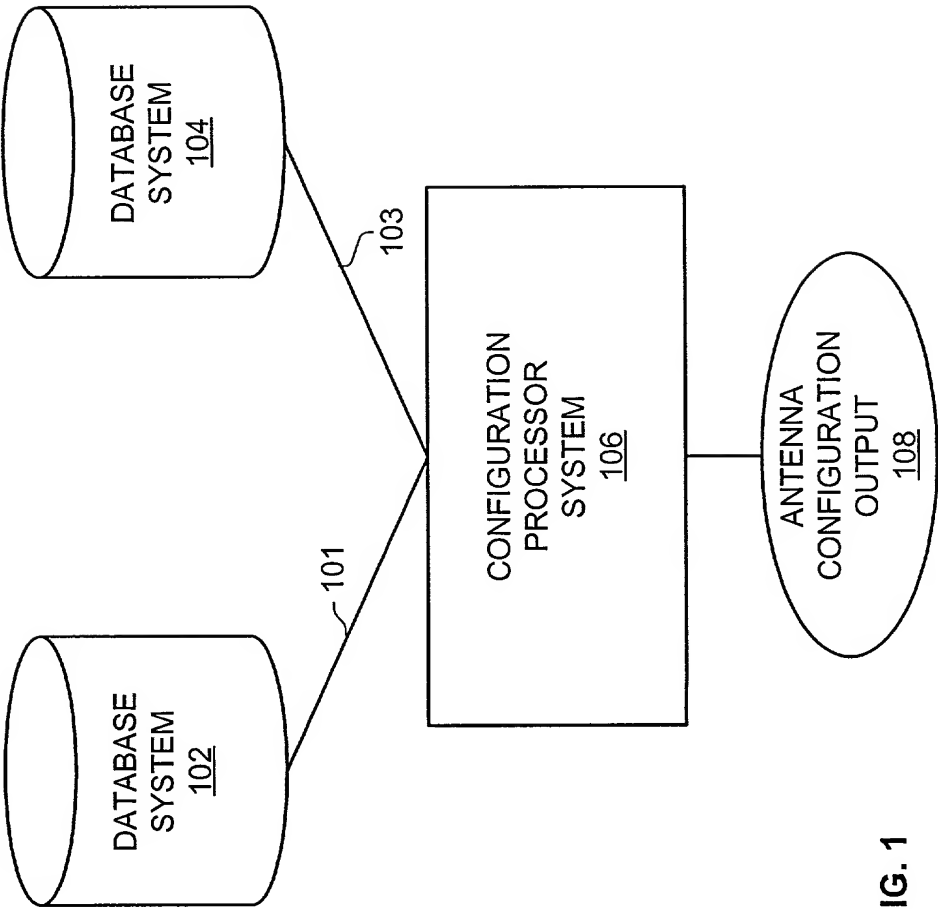


FIG. 1

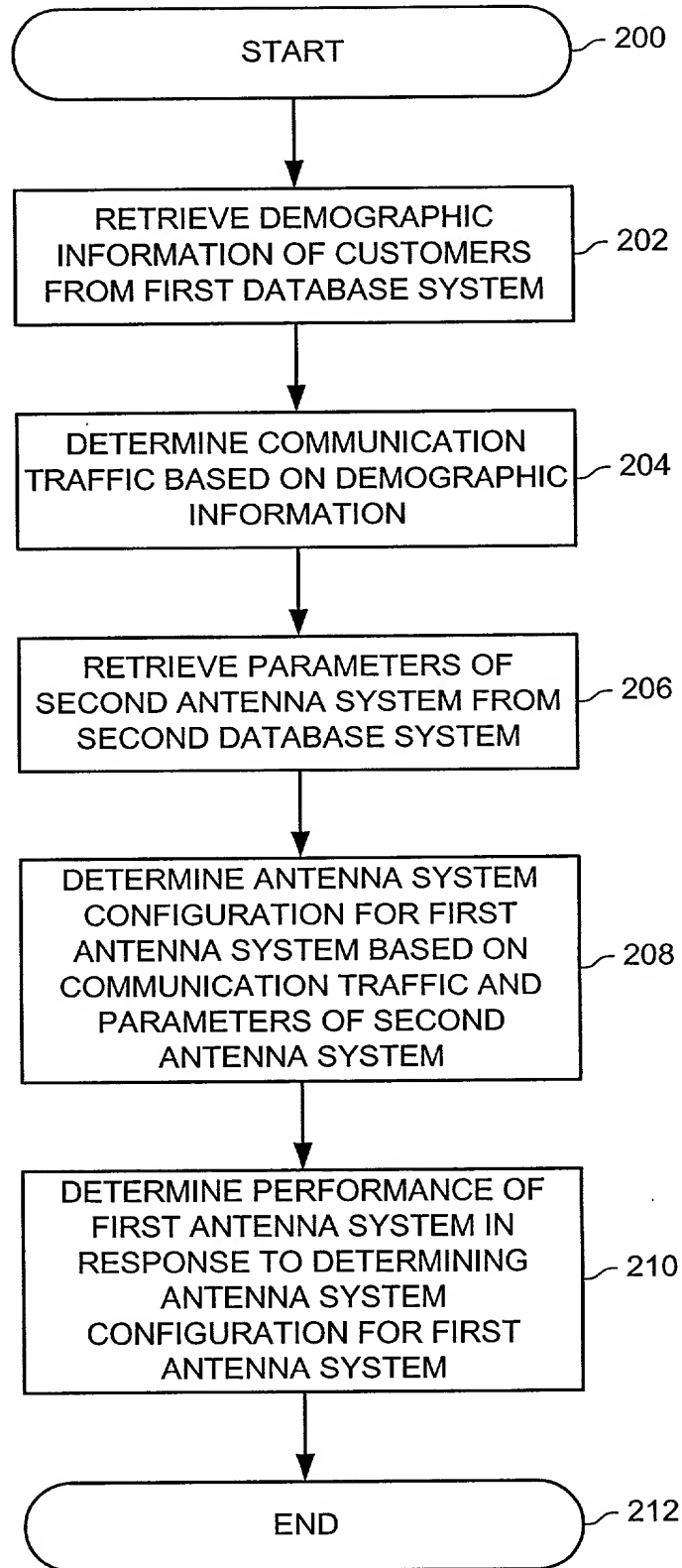


FIG. 2

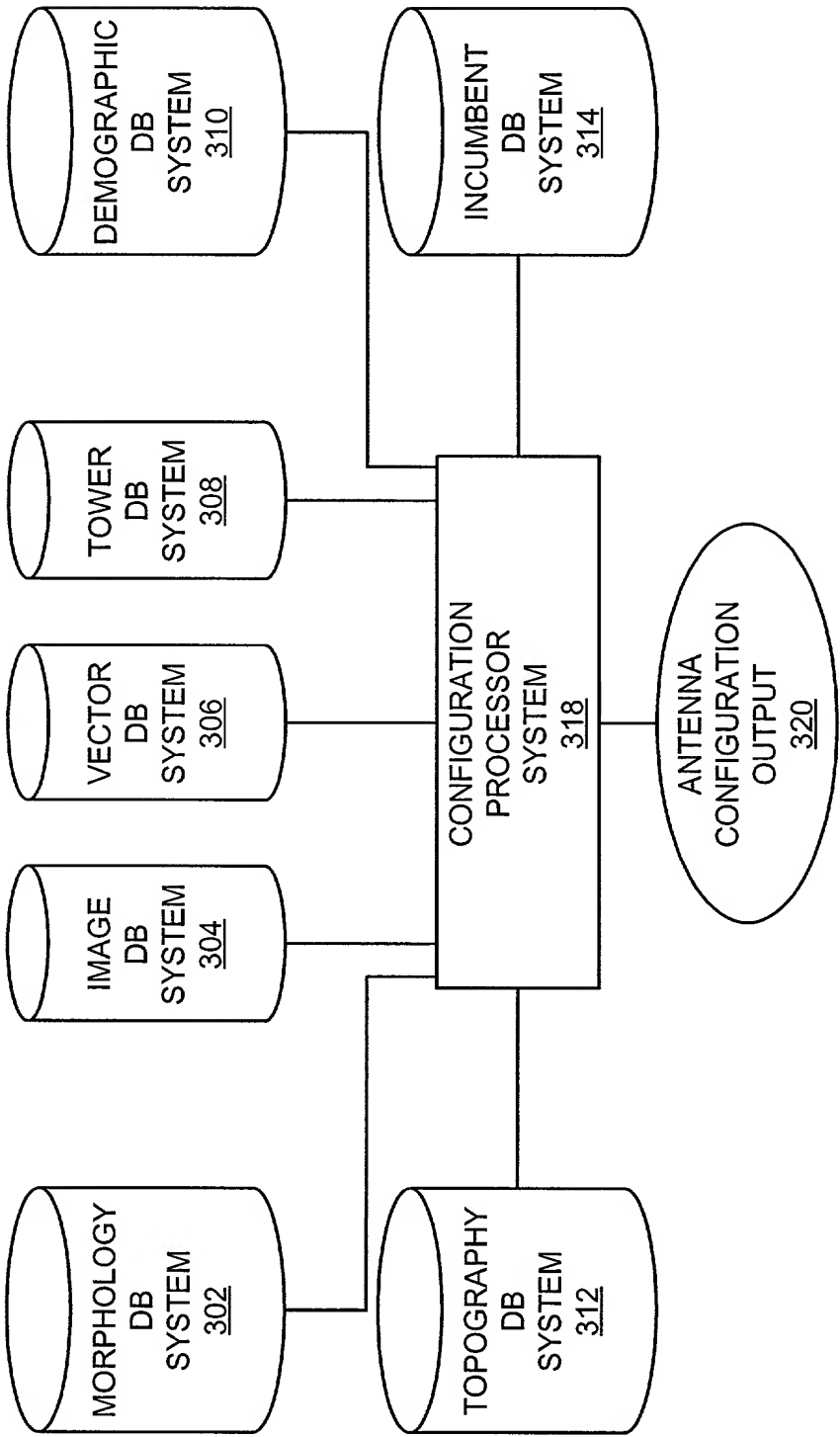


FIG. 3

FIG. 4 is a flowchart of the antenna system design process.

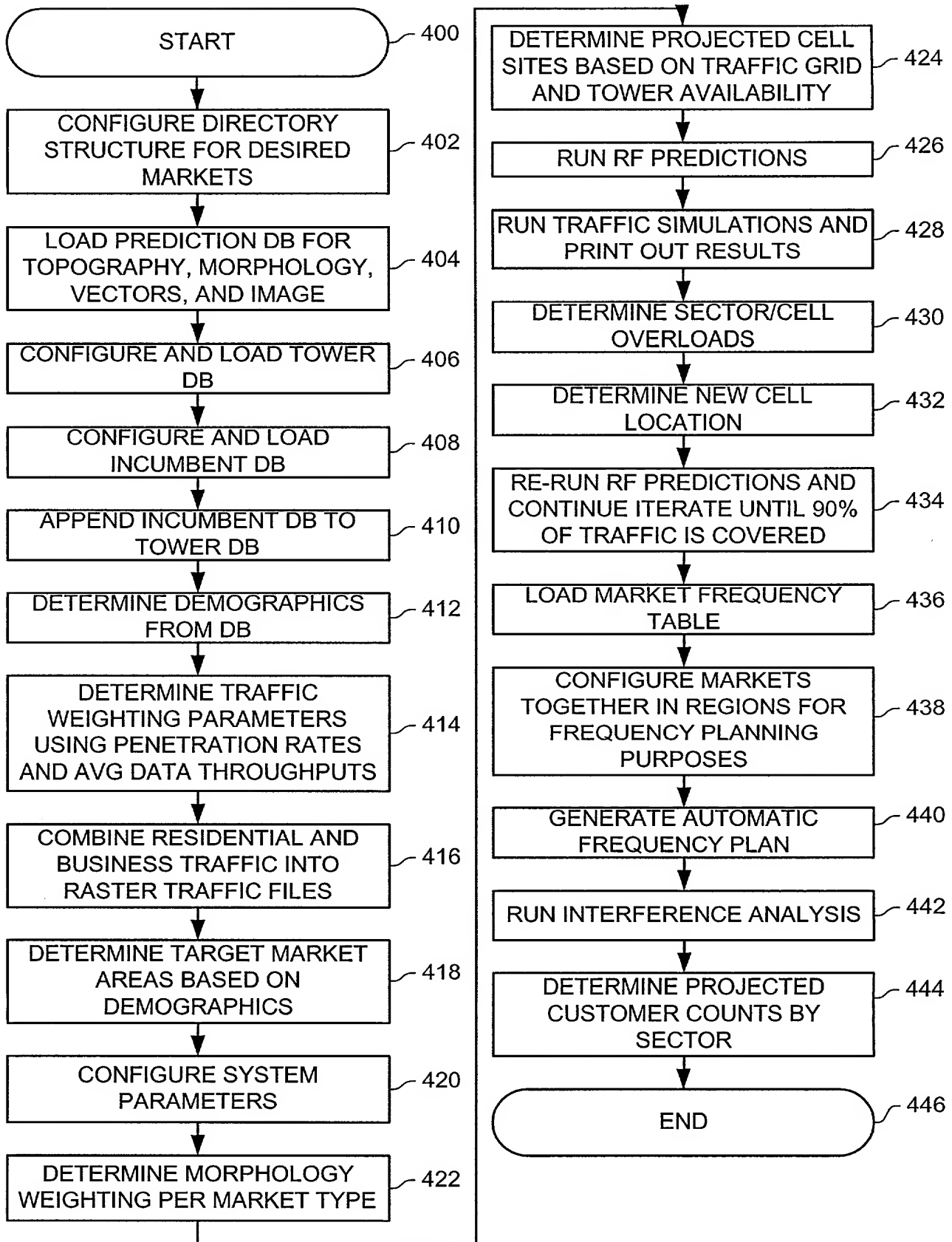


FIG. 4

TOPOGRAPHY	
Field Description	
Location:	
Latitude	
Longitude	
Elevation	

**FIG. 5**

VECTOR	
Field Description	
Primary Roads	
Secondary Roads	
County Boundaries	

**FIG. 6**

**IMAGE**

**TOWER**

**TOWER**

FIG. 8

INCUMBENT SITE		
Field Name	Description	
Rbs	Site ID	
MMDS	Project Type	
Position	Latitude/ Longitude	
Rad	Radius	
Mod	Propagation Model	
Pwr	Antenna Power	
Frq	Frequency	
Azm	Antenna Azimuth	
Aht	Antenna Height	
Typ	Antenna Type	
P	Antenna Polarization	
N	Number of Channels	
D	Data Rate	
Ag	Antenna Gain	

FIG. 9

DEMOGRAPHIC	
Field Description	
Residential Low Speed	
Residential High Speed	
Residential Usage	
Residential Weighted Average Data Throughput	
Business Low Speed	
Business High Speed	
Business Usage	
Business Weighted Average Data Throughput	

FIG. 10

MORPHOLOGY				
Considerations Reference City	Type 1 City Heavy Market >700 k HH	Type 1 City Med Market 250-700 k HH	Type 1 City Small Market 75-250 k HH	Type 1 City Very Small Market <75 k HH
Morph, Type				
0 Water	0	0	0	0
1 Wetland	1	1	1	1
3 Tundra	1	1	1	1
4 Bare Ground	2	2	2	2
12 Residential Area	100	80	70	50
13 Commercial and Services	20	20	15	10
14 Transportation and Utilities	10	10	5	5
15 Urban Areas	60	50	20	10

FIG. 11



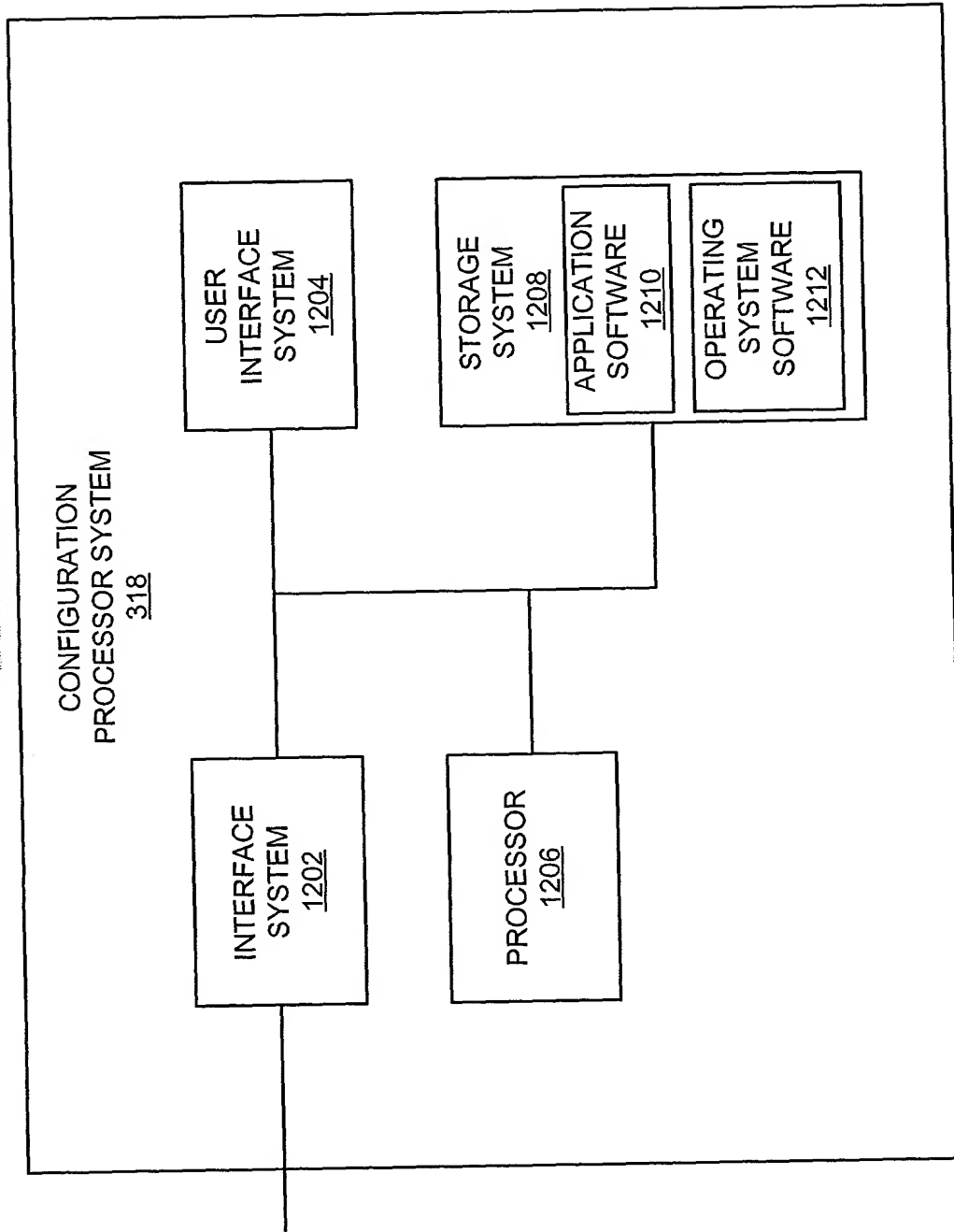


FIG. 12